

The following claims are presented for examination:

1. (Currently amended) An apparatus comprising:

(a) a plurality of access points, wherein each of said access points is capable of performing performs each of a first non-empty set of protocol services for a respective network, and wherein the correctness of each said first protocol service in said first set is based on a maximum timing delay; and

(b) a central controller for:

(i) receiving an input signal from each of said plurality of access points, and

(ii) transmitting to each of said plurality of access points an output signal based on the input signal from that access point and a second protocol service that belongs to a second non-empty set of protocol services; [[,]]

wherein said central controller is capable of performing every protocol service in said second set; and

wherein the correctness of each said second protocol service in said second set is independent of said maximum timing delay ; and

wherein said central controller is incapable of performing any of said first set of protocol services; and

wherein each of said plurality of access points is incapable of performing any of said second set of protocol services; and

wherein the union of said first set and said second set equals the set of protocol services of a protocol stack; and

wherein said first set and said second set are disjoint.

2. (Currently amended) The apparatus of claim 1 wherein a said first protocol service in said first set belongs to a layer selected from the group consisting of: physical layer, and data link layer.

3. (Currently amended) The apparatus of claim 2 wherein said first protocol service in said first set is selected from the group consisting of: a medium access control service, an error control service, and a flow control service.

4. (Currently amended) The apparatus of claim 1 wherein said second protocol service in said second set is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service.

5. (Original) The apparatus of claim 1 wherein said central controller is also for:

- (iii) receiving a datum via a wide-area network, and
- (iv) transmitting said datum to at least one of said access points.

6. (Currently amended) The apparatus of claim 1 wherein **said protocol stack is Institute of Electrical and Electronics Engineers 802.11e** ~~each of said access points is also for receiving a first datum from said central controller and for transmitting a second datum based on said first datum to at least one station in said respective network.~~

7. (Currently amended) A method comprising:

(a) performing **one or more of** a first **non-empty set of** protocol services **using** with a first processor, wherein the correctness of **each said first** protocol service **in said first set** is based on a maximum timing delay **, and wherein said first processor is programmed to perform each protocol service in said first set;**

(b) transmitting a first signal to a second processor, wherein said second processor is **programmed to for** performing **each of** a second **non-empty set of** protocol services, and wherein the correctness of **each said second** protocol service **in said second set** is independent of said maximum timing delay **, and wherein said second processor is not programmed to perform any of said first set of protocol services, and wherein said first processor is not programmed to perform any of said second set of protocol services, and wherein the union of said first set and said second set equals the set of protocol services of a protocol stack, and wherein said first set and said second set are disjoint;** and

(c) receiving from said second processor a second signal based on **a said second** protocol service **in said second set.**

8. (Currently amended) The method of claim 7 ~~further comprising (d) detecting a first condition;~~ wherein **the performing of one or more protocol services at said first processor (a)** is in response to **the detection of a first condition (d).**

9. (Original) The method of claim 8 wherein said first condition comprises the transmission of a signal over a shared-communications channel.

10. (Original) The method of claim 8 wherein said first condition comprises an idle time interval for a shared-communications channel.

11. (Currently amended) The method of claim 8 ~~further comprising (e) detecting a second condition;~~ wherein ~~the transmission of said first signal to said second processor (b)~~ is in response to ~~the detection of a second condition (e)~~.

12. (Original) The method of claim 11 wherein said second condition comprises the transmission of a signal over a shared-communications channel.

13. (Original) The method of claim 11 wherein said second condition comprises an idle time interval for a shared-communications channel.

14. (Currently amended) The method of claim 7 ~~further comprising (d) detecting a condition;~~ wherein ~~the transmission of said first signal to said second processor (b)~~ is in response to ~~the detection of a condition (d)~~.

15. (Currently amended) The method of claim 14 wherein said condition comprises at least one of: (i) the transmission of a signal over a shared-communications channel , and (ii) an idle time interval for said shared-communications channel.

16. (Currently amended) The method of claim 14 wherein said protocol stack is Institute of Electrical and Electronics Engineers 802.11e ~~said condition comprises an idle time interval for a shared-communications channel.~~

17. (Currently amended) The method of claim 7 wherein ~~a said first~~ protocol service in said first set belongs to a layer selected from the group consisting of: physical layer, and data link layer.

18. (Currently amended) The method of claim 17 wherein said ~~first~~ protocol service in said first set is selected from the group consisting of: a medium access control service, an error control service, and a flow control service.

19. (Currently amended) The method of claim 17 wherein said ~~second~~ protocol service in said second set is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service.

20. (Currently amended) A method comprising:

(a) performing a first protocol service for a first network ~~using at~~ a first processor, wherein said first protocol service belongs to a first non-empty set of protocol services, and wherein the correctness of ~~each said first~~ protocol service in said first set is based on a maximum timing delay ~~, and wherein said first processor is programmed to perform each protocol service in said first set;~~

(b) performing said first protocol service for a second network ~~using at~~ a second processor;

(c) transmitting a first signal from said first processor to a third processor;

(d) performing a second protocol service for said first network ~~using at~~ a third processor, wherein said second protocol service belongs to a second non-empty set of protocol services, and wherein the correctness of ~~each said second~~ protocol service in said second set is independent of said maximum timing delay ~~, and wherein said third processor is programmed to perform each protocol service in said second set, and wherein said third processor is not programmed to perform any of said first set of protocol services, and wherein said first processor is not programmed to perform any of said second set of protocol services, and wherein the union of said first set and said second set equals the set of protocol services of a protocol stack, and wherein said first set and said second set are disjoint;~~

(e) transmitting a second signal from said third processor to said first processor, wherein said second signal is based on said second protocol service;

(f) transmitting a third signal from said second processor to said third processor;

(g) performing said second protocol service for said second network ~~using at~~ said third processor; and

~~(h) (e)~~ transmitting a fourth signal from said third processor to said second processor, wherein said fourth signal is based on ~~a said second~~ protocol service in said second set.

21. (Original) The method of claim 20 wherein said first protocol service belongs to a layer selected from the group consisting of: physical layer, and data link layer.

22. (Original) The method of claim 21 wherein said first protocol service is selected from the group consisting of: a medium access control service, an error control service, and a flow control service.

**23.** (Original) The method of claim 20 wherein said second protocol service is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service.